

# ecology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602 Tel. 312/578-9243, Fax: 312/578-9345



April 1, 1999

Jeanne Griffin, Early Action Project Manager United States Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604

Re:

Avery Street Site

**HRS** Prescore

Detroit, Wayne County, Michigan

TDD: S05-9611-013 PAN: 6B135ESIXX

CERCLIS ID: MI0002390441

Dear Ms. Griffin:

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked by the United States Environmental Protection Agency (U.S. EPA) to prepare a Hazard Ranking System (HRS) prescore for the above-referenced site under Technical Direction Document (TDD) S05-9611-013.

During a U.S. EPA emergency removal action, all Comprehensive Environmental Response, Compensation, and Liability Act waste materials located in the building were removed from the site; therefore, the HRS prescore for the site is 0. START has prepared a Preliminary Assessment Equivalent Report which summarizes the site background and the U.S. EPA emergency removal action conducted at the site.

The Region 5 U.S. EPA On-Scene Coordinator for the emergency removal action was Rose Ellison.

Sincerely,

Greg H. Haas

START Member

Mary Jane Ripp

START Program Manager

cc:

Site File - TDD S05-9611-013

CONFIGERMA

# PRELIMINARY ASSESSMENT EQUIVALENT REPORT AVERY STREET SITE DETROIT, WAYNE COUNTY, MICHIGAN TDD: S05-9611-013

PAN: 6B135ESIXX CERCLIS ID: MI0002390441

April 1, 1999

## Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Site Assessment Section
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Greg H. Haas, START Member	Date: _	4/1/99
Reviewed by: Karen Kirchner, START Assistant Program Manager	Date: _	4/1/99
Approved by:  Mary Jane Ripp, START Program Manager	_ Date:	4/1/99
ecology and environment,	inc.	

International Specialists in the Environment

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## 1. Introduction

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) has been tasked by the United States Environmental Protection Agency (U.S. EPA) to complete a Preliminary Assessment (PA) Equivalent Report for the Avery Street (AS) site under Technical Direction Document (TDD) S05-9611-013. The PA Equivalent Report is based on information and data from the Letter Report prepared by E & E, and information provided by U.S. EPA, E & E, and other personnel familiar with the site. Additional details on the emergency removal action, including photodocumentation, are available in the U.S. EPA Region 5 site file.

#### 2. Site Description

The AS site is an abandoned, two-story building located at 5940 Avery Street in Detroit, Wayne County, Michigan. The site coordinates are latitude 42°21'32.9"N and longitude 83°5'9"W (Appendix A). At the time of the 1998 U.S. EPA emergency removal action there was a 30,000-square-feet, two-story building with a basement on site (Appendix B). The site is located in a residential/light industrial area of Detroit, Michigan. The AS site is bordered by a Grand Trunk Western Railroad yard to the south; an active manufacturing business and Avery Street to the west; an alley and active businesses to the east; and an abandoned building and vacant lot to the north.

In June 1998, during a U.S. EPA emergency removal action, START documented more than a thousand 1- and 5-gallon containers and several 55-gallon drums located inside the on-site building. Labels on several 1- and 5-gallon containers and 55-gallon drums indicated that most of their contents were inks or paints. A 55-gallon drum was labeled "hazardous waste, waste code F005," a 1-gallon container was labeled "hardener flammable," and several small containers were labeled "flammable liquid." Bales of recycled plastic and other debris were located on the building's main level. Three 55-gallon drums containing black oil and/or sludge and one 100-gallon aboveground storage tank (AST) were located in the basement. Containers of solvents were also present.

Approximately 20,649 people live within a 1-mile radius of the site (Appendix C). The nearest residence is located approximately 0.125 mile to the north of the site (Appendix B). The nearest surface water body is the Detroit River, located approximately 2.75 miles to the southeast of the site. An athletic field, a playground, and several schools are located within a 0.5-mile radius of the site. The site is not fenced and is easily accessible to trespassers, as evidenced by the extreme vandalism at the site (Appendix D).

City of Detroit residents receive municipal drinking water supplied by intakes in Lake Huron and the Detroit River. The site topography is generally level. Surface water runoff from the site enters the city sewer system and flows to the city wastewater treatment plant via storm sewers located

adjacent to the site. According to a telephone conversation with Milton Johnson of the Detroit Wastewater Treatment Plant, in cases of heavy rain/water flow, the storm water bypasses the treatment plant and flows directly to the Detroit River (Appendix E). Groundwater occurs in saturated clays under the site and is not part of an aquifer system.

#### 3. Previous Assessment and Removal Activities

The AS site was reported to the Region 5 U.S. EPA Emergency Response Branch (ERB) by the U.S. EPA Criminal Investigation Division (CID) because of the illegal dumping of containers of paint-related materials at the site. On June 25, 1998, U.S. EPA, START, and the Emergency Response Cleanup Services (ERCS) contractor documented that more than a thousand 1- and 5-gallon containers and several 55-gallon drums were located inside the building (Appendix B). Labels on several 1- and 5-gallon containers and 55-gallon drums indicated that the majority of their contents were inks, paints, solvents, and oils. A number of various-sized containers had labels that indicated their contents were flammable. Bales of recycled plastic and other debris were located on the building's main level. A 100-gallon AST was located in the basement.

Emergency removal activities were conducted from June 24 through July 2, 1998, by U.S. EPA, START, and ERCS. The emergency removal action consisted of sampling, photodocumentation, segregation and packing of drums, the crushing of empty drums, and waste disposal. U.S. EPA, START, and ERCS observed that various colored inks/paints from many overturned containers had spilled on the floor. START conducted air monitoring inside and outside the building with a photoionization detector (PID), a combustible gas indicator (CGI), and a radiation meter. No readings above background levels were detected in the breathing zone. PID readings collected from the headspace of several open small containers and spilled materials ranged between 0 and 32.4 parts per million (ppm). ERCS collected two composite samples of inks/paints, a grab sample from a drum containing solvents, a grab sample from a drum containing oil for waste characterization. START collected a grab sample of sludge from a drum located in the basement of the AS building. The samples were analyzed for toxicity characteristic leaching procedure (TCLP) volatile organic compounds (VOCs), TCLP semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), total petroleum hydrocarbons, flash point, pH, Resource Conservation and Recovery Act (RCRA) metals, and heat content (British Thermal

Units). Analytical results revealed elevated levels of TCLP barium and lead in the oil sample and elevated levels of TCLP lead in the sludge sample (Appendix B).

Total waste removed and disposed from the AS site were as follows: approximately 1,000 small containers of waste materials, which were consolidated into nineteen 85-gallon overpack drums and nine 55-gallon drums; one 20-cubic-yard rolloff box containing nonhazardous debris; and four 1-cubic-yard cardboard boxes containing hazardous paint-related waste. The first floor (spill area) of the building was scraped clean and decontaminated by ERCS. After removal activities were completed by U.S. EPA, the site was referred to the City of Detroit. The City of Detroit has demolished the on-site building (Appendix F).

#### 4. Migration and Exposure Pathway Factors and Targets

This section describes the four migration and exposure pathways and targets associated with the AS site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

## 4.1 Groundwater Migration Pathway

Comprehensive groundwater sampling has not occurred at the AS site. START did not observe any incidence of groundwater contamination during the U.S. EPA emergency removal action. Groundwater is not used as a drinking water source in the site area.

#### 4.2 Surface Water Migration Pathway

The nearest probable point of entry (PPE) of runoff from the site to a surface water body is the Detroit River, which is located 2.75 miles northeast of the site. Surface water runoff enters the city wastewater treatment plant via storm sewers located adjacent to the site. In cases of heavy rain/water flow, the storm water bypasses the wastewater treatment plant and enters directly into the Detroit River (Appendix E). The source of drinking water for residents of the Detroit area is surface water from intakes located in the Detroit River and Lake Huron. Both Lake Huron and the Detroit River provide a habitat for fish and other wildlife. Recreational fishing occurs on both water bodies. No surface water contamination attributable to the site was documented during the U.S. EPA emergency removal action. No surface water or sediment sampling occurred during the emergency removal action.

#### 4.3 Soil Exposure Pathway

According to site file information, soil was not impacted by contaminants at the AS site. All hazardous wastes were located inside the site building. Following a site reconnaissance by U.S. EPA

and START personnel, it was concluded that the spilt wastes had not migrated outside to impact the soil. No soil or wipe samples were collected during the U.S. EPA emergency removal action. All hazardous waste at the site was removed following the June 1998 emergency removal action. The total population within a 2-mile radius of the AS site is approximately 83,495 (Appendix C). The site is not fenced and is easily accessible to trespassers (Appendix D). Vandalism is evidenced by the broken windows and missing doors throughout the site (Appendix B). The nearest residence is located approximately 0.125 mile north of the site and there are several schools located within a 0.5-mile radius of the site.

## 4.4 Air Migration Pathway

Air monitoring was conducted inside and outside of the site building during the U.S. EPA emergency removal action. No readings above background were detected in the breathing zone. All potentially hazardous wastes have been removed from the site and properly disposed of, thereby eliminating any potential sources for the off-site air migration of contaminants.

#### 5. Summary

The AS site is the location of a former, vacant two-story building in Detroit, Wayne County, Michigan, currently in the custody of the City of Detroit. The site is located in a mixed residential/light industrial area. Approximately 83,495 persons live within a 2-mile radius of the site. The site was referred to U.S. EPA ERB after U.S. EPA CID discovered the illegal dumping of containers of paint-related materials at the site. Over 1,000 containers and drums containing flammable liquids, solvents, and oil; an AST; and bales of plastic and debris were located inside the building. All hazardous wastes have been removed from the site as a result of the U.S. EPA emergency removal action conducted in June and July 1998. The City of Detroit has demolished the on-site building. No further action is planned by the U.S. EPA Removal Section at the site.

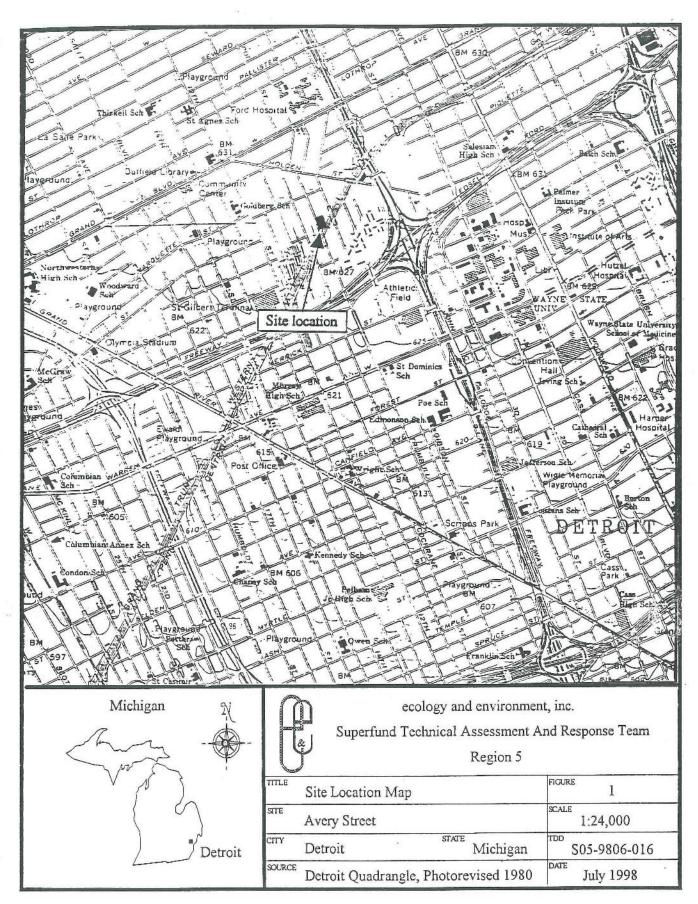
## Appendix A

## Site Location Map

Source:

Ecology and Environment, Inc., 1998, Letter Report for Avery Street, Detroit, Wayne

County, Michigan.



# Appendix B

START Letter Report

LETTER REPORT
FOR
AVERY STREET
DETROIT, WAYNE COUNTY, MICHIGAN
TDD S05-9806-016
PAN 8N1601RZXX

August 27, 1998

## Prepared for:

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Emergency Response Branch 77 West Jackson Boulevard Chicago, Illinois 60604

Prepared by: Colin 1. Lihron	Date: 8/27/98
Cedric N. Gibson, START Project Manager	
Reviewed by: Miel Deeth bo	Date: 8/27/98
Patrick Zwilling, START Assistant Program Manager	
Approved by: Michel L. Dieiff	Date: 8/27/28
Michael L. Dieckhaus, START Assistant Program Manager	



ecology and environment, inc.

12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900 International Specialists in the Environment



August 27, 1998

Ms. Gail Nabasny
START Project Officer
Emergency Support Section
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re:

Avery Street

Detroit, Wayne County, Michigan

TDD S05-9806-016 PAN 8N1601RZXX

Dear Ms. Nabasny:

On June 24, 1998, the United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) to provide technical support to the On-Scene Coordinator (OSC) in overseeing emergency removal activities at the Avery Street site in Detroit, Wayne County, Michigan, under Technical Direction Document (TDD) S05-9806-016. Tasks to be completed under this TDD included: identifying personal safety requirements and providing health and safety support; performing financial monitoring of site cleanup costs; performing surveillance activities using a variety of vehicles, communication equipment and audio-visual equipment; and providing administrative and technical support to U.S. EPA in the preparation of site reports and other technical site-related documents. The START member conducting emergency response activities with U.S. EPA OSC Rose Ellison, was Cedric N. Gibson. Photodocumentation is presented in Attachment A.

The Avery Street (AS) site is located at 5940 Avery Street in Detroit, Wayne County, Michigan (latitude 42°21'32.9" N and longitude 83°5'9" W) (Attachment B, Figure 1). The AS site is an abandoned two-story building located in a residential/light industrial area of Detroit. The site is bordered by a Grand Trunk Western Railroad yard to the south, an active manufacturing business and Avery Street to the west, an alley and active businesses to the east, and an abandoned building and a vacant lot to the north. The nearest residence is approximately one-eighth mile north of the site. The Edsel Ford Freeway (I-94) is approximately one-half mile south of the site. The building property, formerly owned by Sun Oil, is in arrears on taxes, and ownership has reverted to the City of Detroit.

On June 24, 1998, the U.S. EPA Criminal Investigation Division notified the U.S. EPA Region 5 Emergency Response Branch (ERB) regarding the illegal dumping of containers of paint-related materials. More than one thousand 1- and 5-gallon containers and several 55-gallon drums were located inside the building. U.S. EPA activated the Emergency Response Cleanup Services (ERCS) contractor, Environmental Quality Management (EQM), to conduct emergency removal activities at the AS site.

EQM subcontracted Inland Waters of Ohio (IWO) to provide site personnel and equipment.

On June 25, 1998, at approximately 1030 hours, IWO mobilized personnel and equipment to the site to begin emergency actions to remove paint-related materials that were illegally dumped. At approximately 1100 hours, U.S. EPA and START mobilized to the site to assess potential threats to human health, welfare, and the environment by the abandoned paint materials, and to oversee removal actions.

U.S. EPA, START, and ERCS performed a site reconnaissance of the building (Attachment B, Figure 2). The two-story building was approximately 30,000-square-feet in size and contained a basement. Six overhead doors were located on the western side of the building; four overhead doors were located on the eastern side of the building; and one overhead door was located on the southern portion of the building's main level. Many of the overhead doors were open, and several windows were broken. A personnel door on the western side of the building had been removed allowing access to the building.

Several 1- and 5-gallon containers and 55-gallon drums indicated that most of their contents were inks or paints. A 55-gallon drum was labeled "hazardous waste, waste code F005," a 1-gallon container was labeled "hardener flammable", and several small containers were labeled "flammable liquid." The small containers and drums were located in the southern portion of the main level of the building. Some of the 55-gallon drums contained 1- and 5-gallon containers. Containers of solvents were also present. Various colored inks/paints from many overturned containers had spilled onto the floor. Bales of recycled plastic and other debris were located mainly in the northern portion of the building's main level. Three 55-gallon drums, containing oil and /or sludge, were located in the basement of the building. One of the drums was full of a black oil and sludge, and the other two were half full of oil. One aboveground tank approximately 100-gallons in size was also located in the basement. The second level of the building, consisting of three rooms, contained trash and debris.

START conducted air monitoring inside and outside the building with a photoionization detector (PID), a combustible gas indicator (CGI), and a radiation meter. No readings above background were detected in the breathing zone during the site reconnaissance. PID readings were collected from the headspace of several open small containers and material spilled on the floor. PID readings of headspaces ranged between 0 and 32.4 parts per million (ppm) above background. Photo- and videodocumentation of the containers and label information were completed by START.

IWO proceeded by removing vegetation and debris near the personnel door on the western side of the building. IWO segregated full and empty small containers and packaged the full small containers in 1-cubic-yard cardboard boxes and 85-gallon overpack drums, for disposal. Some of the ink/paint liquids were bulked into 55-gallon drums for disposal. WBS, Inc., Detroit, Michigan, mobilized a 20-cubic-yard rolloff box to the site for disposal of Resource Conservation and Recovery Act (RCRA)-empty containers and nonhazardous debris. IWO collected a composite sample (sample D1) of inks/paints for waste characterization.

During segregation and packaging activities, PID readings from the headspace of some containers ranged between 543 and 1,029 ppm. There were sustained readings between 4.5 and 15.4 ppm in the breathing zone on the PID.

On June 26, 1998, IWO transferred oil from drums in the basement to 55-gallon drums on the main level. One drum, half-filled with sludge, was removed from the basement. The sludge in the drum appeared to contain oil, floor absorbent, and other debris. A drum crusher was mobilized to site to compact RCRA-empty drums for disposal. Segregation and packaging of the small containers, drum crushing, and debris removal were completed. Approximately 500 RCRA-empty small containers and drums were placed into

the rolloff box for disposal. IWO collected sample D2 from a drum containing a solvent, and sample D3 from a drum containing a composite of several inks/paints. Samples D1, D2, and D3 were sent to Waste Research and Reclamation Co., Inc. (WRRC), in Eau Claire, Wisconsin, for waste characterization. Oil sample Oil 1 was collected from material that was transferred from the basement. The oil sample was transported from site by a courier to DLZ Laboratories in Lansing, Michigan, for waste characterization. Approximately 1,000 small containers and materials from approximately 25 drums were consolidated into nineteen 85-gallon overpack drums, nine 55-gallon drums, and four 1-cubic-yard cardboard boxes. U.S. EPA, ERCS, and START demobilized from the site to await completion of analyses and disposal arrangements.

On June 29, 1998, U.S. EPA and START returned to the AS site and collected sample Sludge 1 from the sludge drum that was removed from the basement. Samples Oil 1 and Sludge 1 were analyzed for polychlorinated biphenyls (PCBs), flash point, pH, total petroleum hydrocarbons, toxicity characteristic leaching procedure (TCLP) RCRA metals, plus copper and zinc, TCLP volatile organic compounds, TCLP semivolatile organic compounds, and British thermal units (Btus) at DLZ Laboratories in Lansing, Michigan. Elevated levels of TCLP barium and lead were detected in sample Oil 1, and elevated levels of TCLP lead were detected in Sludge 1.

On July 2, 1998, WBS, Inc., transported the 20-cubic-yard rolloff box containing nonhazardous debris from the site to the WBS facility in Detroit, Michigan, for landfilling. On July 20, 1998, Trism Environmental Services, a division of Tri-State Motor Transport, Joplin, Missouri, transported a total of 28 drums (nineteen 85-gallon overpack drums and nine 55-gallon drums) and four 1-cubic yard cardboard boxes of hazardous paint-related waste to the WRRC facility for fuel blending. This completed removal activities by U.S. EPA who referred the site to the City of Detroit. The City of Detroit plans to demolish the building.

Preparation of this Letter Report, with the included attachments, completes the tasks specified by this TDD. If you have any questions or need additional information, please contact our office.

Sincerely,

Cedric N. Gibson

START Project Manager

Michael L. Dieckhaus

START Assistant Program Manager

Attachments:

A - Photodocumentation

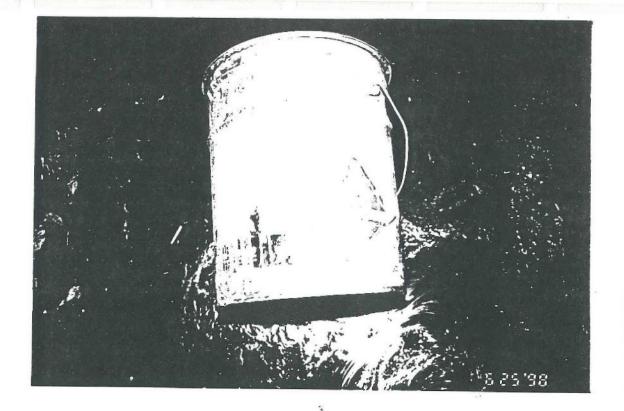
B - Site Illustrations

cc: Rose Ellison, OSC, U.S. EPA, Grosse Ile, Michigan Thomas Kouris, START Program Manager, Region 5

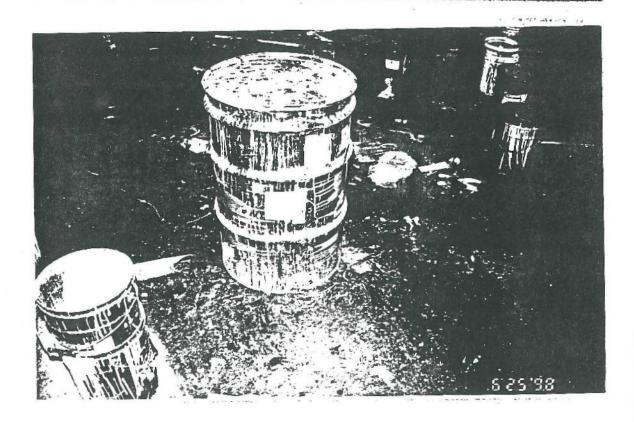
Site File

## Attachment A

Photodocumentation



Site: Avery Street Photo No: 1 (R1F5) Direction: North Photographer: C. Gibson Date: June 25, 1998
Subject: A spilled metal container with a flammable liquid label and ink/paint on floor.



Site: Avery Street Photo No: 2 (R1F7) Direction: Southeast Photographer: C. Gibson

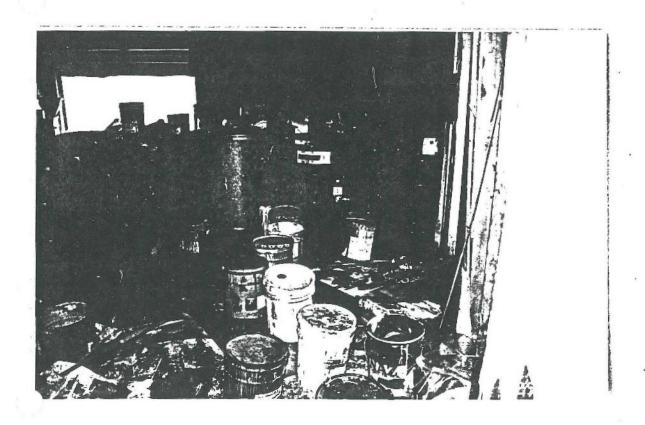
Date: June 25, 1998
Subject: A drum with a hazardous waste label and the surrounding area.



Site: Avery Street Photo No: 3 (R1F8) Direction: East

Photographer: C. Gibson

Date: June 25, 1998 Subject: Drums and containers in the southern portion of the main level of the building at the Avery Street site.

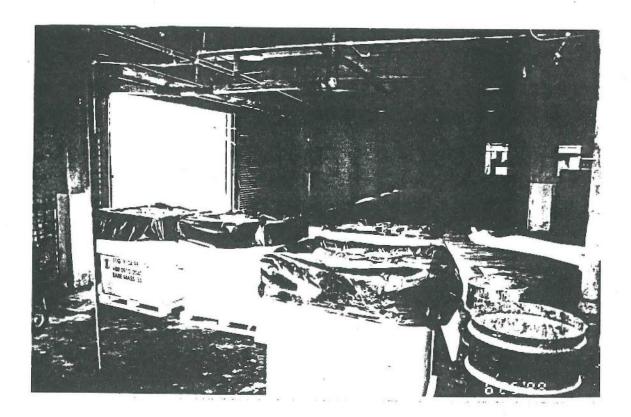


Site: Avery Street Photo No: 4 (R1F9) Direction: South Photographer: C. Gibson Date: June 25, 1998

Subject: Drums and containers in the southern portion of the main level of the building.



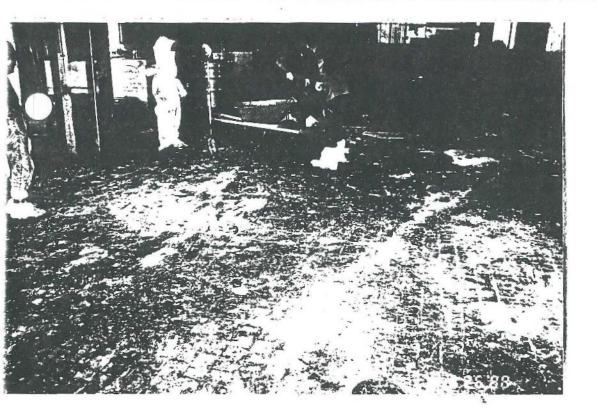
Site: Avery Street Photo No: 5 (R1F10) Direction: Southeast Photographer: C. Gibson Date: June 25, 1998
Subject: Drums and containers in the southern portion of the main level of the building.



Site: Avery Street Photo No: 6 (RIF14) Direction: Northwest Photographer: C. Gibson

Date: June 25, 1998

Subject: Small containers staged in 1-cubic-yard boxes for transport and disposal.

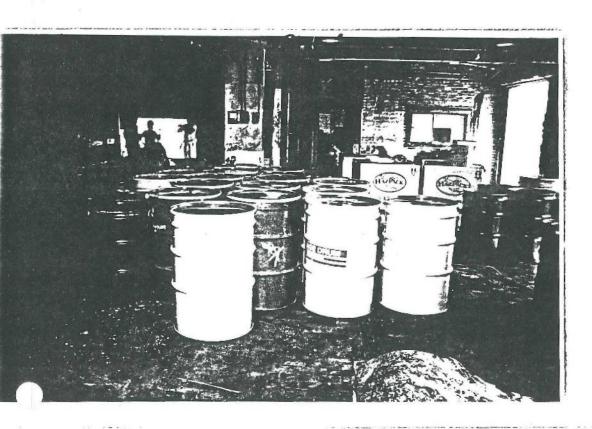


Site: Avery Street Photo No: 7 (R1F19) Direction: North

Photographer: C. Gibson

Date: June 26, 1998 Subject: ERCS scrapes the floor of the main level of

the building.



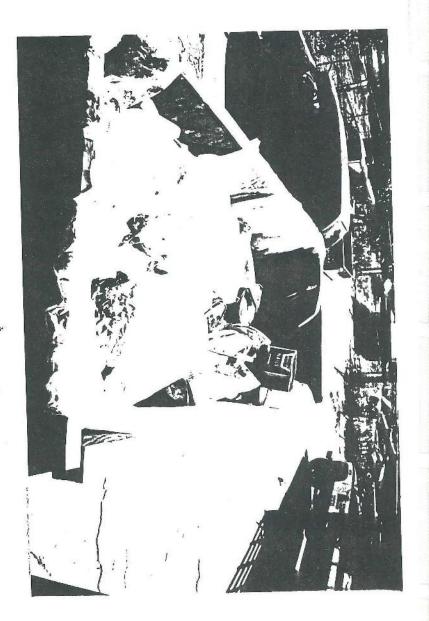
Site: Avery Street Photo No: 8 (R1F20) Direction: South

Photographer: C. Gibson

Date: June 26, 1998

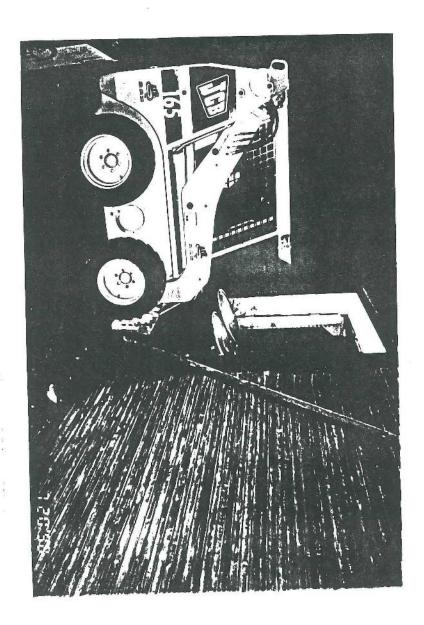
Subject: Drums and overpacks staged for transport

and disposal.



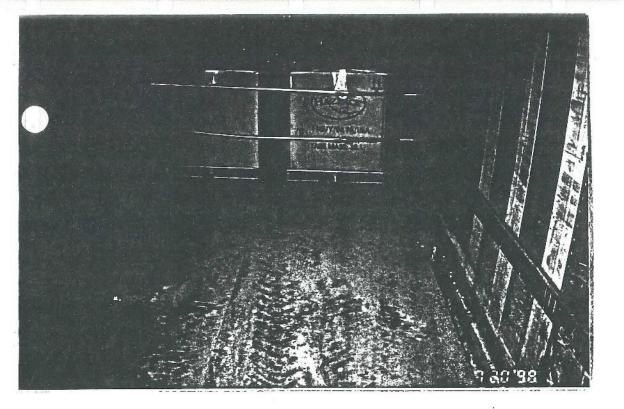
Site: Avery Street Photo No: 9 (R1F22) Direction: West Photographer: C. Gibson

Date: June 26, 1998
Subject: Nonhazardous empty drums and debris staged in a rolloff box for transport and disposal.



Site: Avery Street Photo No: 10 (R2F3) Direction: South Photographer: C. Gibson

Date: July 20, 1998
Subject: ERCS loading overpacked drums onto semitrailer for transport and disposal.



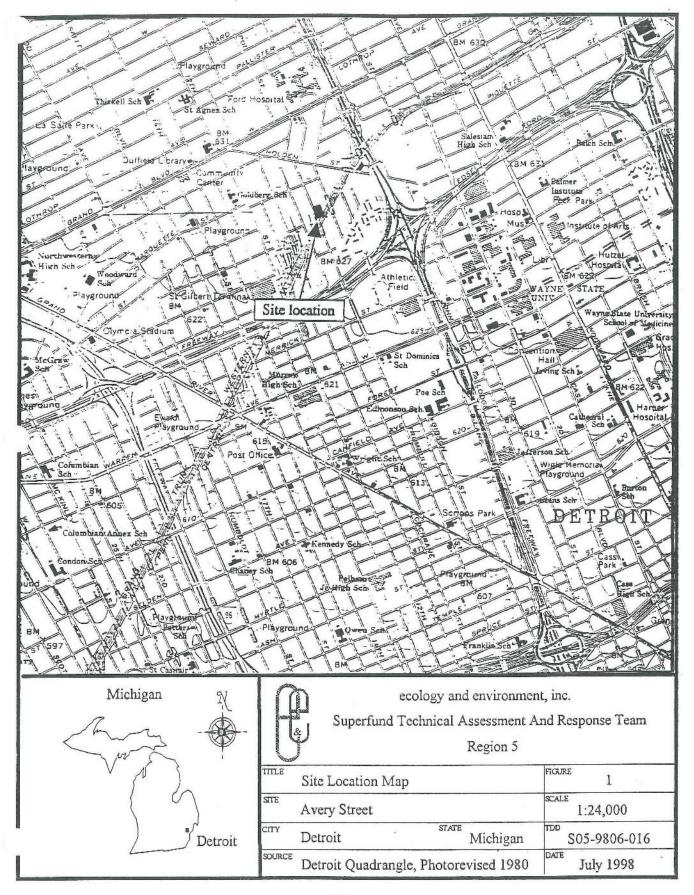
Site: Avery Street Photo No: 11 (R2F11) Direction: West Photographer: C. Gibson

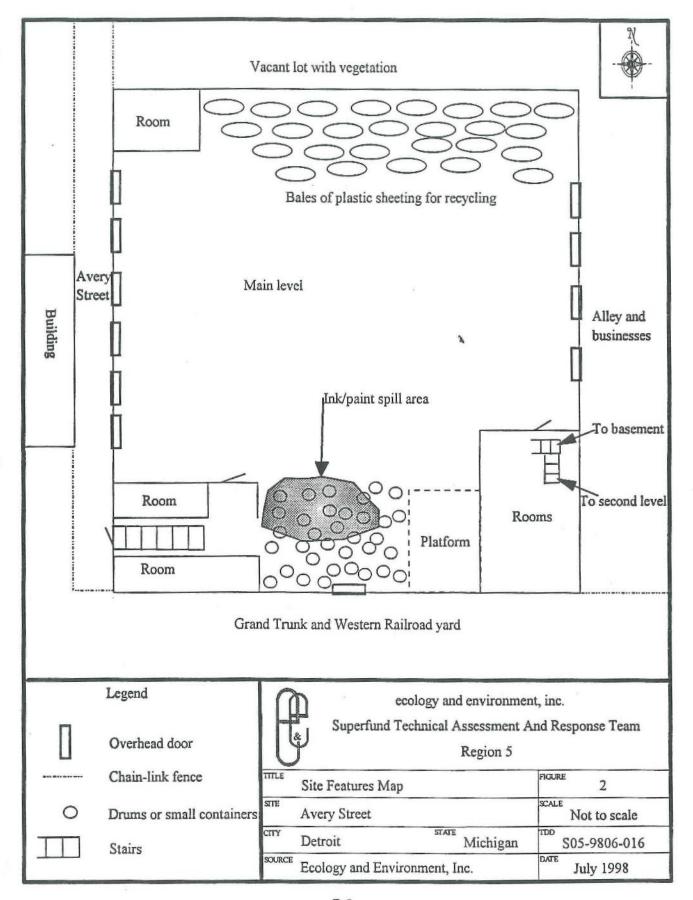
Date: July 20, 1998 Subject: All waste from site loaded onto semitrailer for transportation and disposal.

KZF3 AKIY

Attachment B

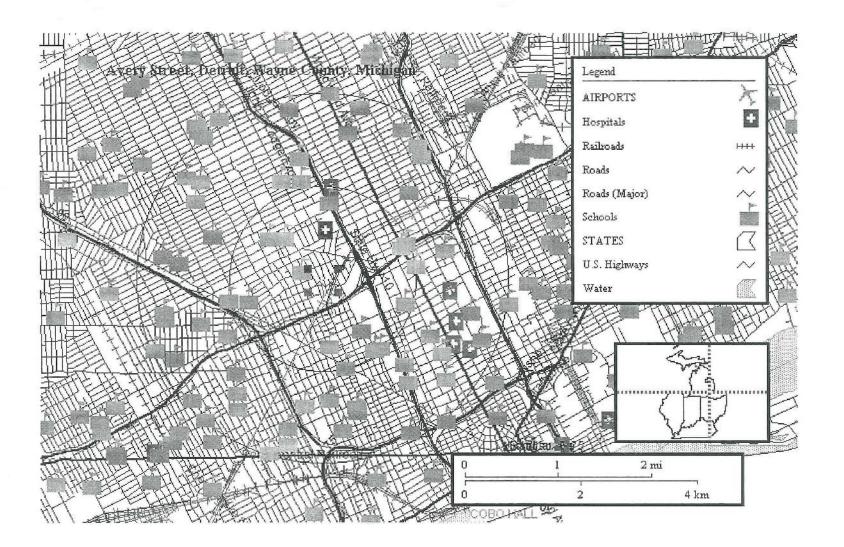
Site Illustrations





# Appendix C

U.S. Census Data



Age 0 Thru 4:	1433
Age 05 Thru 09:	1083
Age 10 Thru 19:	2328
Age 20 Thru 49:	8818
Age 50 Thru 64:	2292
Age 65 And Over:	3376
Aggregate Personal Income:	154305951
American Indian:	95
Asian/Pacific Islander:	613
Black Population:	16420
Hispanic Population:	222
LOCATION:	42.359138, -83.085831
Land Area (sq. Miles):	3.14
METHOD:	Block Group Proration method.
Minority Population:	17297
Number Of Families:	3866
Number Of Households:	8984
Number Of Persons:	19330
Number Of Persons (stf3):	19237
Other Race:	99
Owner Occupied:	1818
Percent Age 0 Thru 4:	7.4
Percent Age 05 Thru 09:	5.6
Percent Age 10 Thru 19:	12.0
Percent Age 20 Thru 49:	45.6
Percent Age 50 Thru 64:	11.9
Percent Age 65 And Over:	17.5
Percent Asian:	3.2
Percent Below Poverty:	43,6
Percent Black:	84.9
Percent Hispanic:	1.1
Percent Indian:	0.5
Percent Minority:	89.5
Percent Other Race:	0.5
Percent White:	10.9
Persons Below Poverty:	8421
RADIUS:	1.00 miles
Renter Occupied:	7167
SOURCE:	Summary of 47 Block Groups
White Population:	2103

Age 0 Thru 4:	6238
Age 05 Thru 09:	5043
Age 10 Thru 19:	10751
Age 20 Thru 49:	35192
Age 50 Thru 64:	10951
Age 65 And Over:	15321
Aggregate Personal Income:	638677954
American Indian:	298
Asian/Pacific Islander:	1289
Black Population:	73178
Hispanic Population:	1328
LOCATION:	42.359138, -83.085831
Land Area (sq. Miles):	12.57
METHOD:	Block Group Proration method.
Minority Population:	75803
Number Of Families:	17148
Number Of Households:	36271
Number Of Persons:	83495
Number Of Persons (stf3):	83522
Other Race:	677
Owner Occupied:	9990
Percent Age 0 Thru 4:	7.5
Percent Age 05 Thru 09:	6.0
Percent Age 10 Thru 19:	12.9
Percent Age 20 Thru 49:	42.1
Percent Age 50 Thru 64:	13.1
Percent Age 65 And Over:	18.3
Percent Asian:	1.5
Percent Below Poverty:	44.5
Percent Black:	87.6
Percent Hispanic:	1.6
Percent Indian:	0.4
Percent Minority:	90.8
Percent Other Race:	0.8
Percent White:	9.6
Persons Below Poverty:	37126
RADIUS:	2.00 miles
Renter Occupied:	26281
SOURCE:	Summary of 155 Block Groups
White Population:	8053

Age 0 Thru 4:	93109
Age 05 Thru 09:	79646
Age 10 Thru 19:	164721
Age 20 Thru 49:	444818
Age 50 Thru 64:	120747
Age 65 And Over:	124933
Aggregate Personal Income:	9706677169
American Indian:	3655
Asian/Pacific Islander:	8461
Black Population:	777916
FIPS Place Code:	22000
FIPS State Code:	26
FIPS State_County Code:	26163
High Owner Cost:	21.9
High Renter Cost:	52.6
Hispanic Population:	28473
Houses built before 1940:	146748
Land Area (sq. Miles):	138.7
Latitude Internal Point:	+42383100
Lived in same house 1985:	59.8
Longitude Internal Point:	-083102198
Median Household Income:	18742
Median YR house built:	1945
Minority Population:	815696
Number Of Families:	244327
Number Of Households:	374057
Number Of Persons:	1027974
Number Of Persons (stf3):	1027974
Number of Housing Units:	410027
Other Race:	15626
Owner Occupied:	197929
Percent Age 0 Thru 4:	9.1
Percent Age 05 Thru 09:	7.7
Percent Age 10 Thru 19:	16.0
Percent Age 20 Thru 49:	43.3
Percent Age 50 Thru 64:	11.7
Percent Age 65 And Over:	12.2
Percent Asian:	0.8
Percent Bachelors degree:	8.5
Percent Below Poverty:	32.4

1990 Census Data, Detroit, Wayne County, Michigan

Percent Black:	75.7	
Percent High School grad.:	62.0	
Percent Hispanic:	2.8	
Percent Indian:	0.4	
Percent Minority:	79.3	
Percent Other Race:	1.5	
Percent Owner Occupied:	52.9	
Percent Renter Occupied:	47.1	
Percent Rural Population:	0.0	
Percent Urban:	100.0	
Percent White:	21.6	
Persons Below Poverty:	328467	
Place Name:	DETROIT CITY, MI	
Renter Occupied:	176128	
School Enrollment:	206424	
State Abbreviation:	MI	
Water Area (sq. Miles):	4,2	
White Population:	222316	

## Appendix D

Telephone Log - Ecology & Environment, Inc.

ecology and environment, inc., telephone log			
Contact	Company or Agency		
Cedric Gibson	Ecology and Environment, Inc.		
Position	Contact Phone Number		
7	313-946-0900		
E & E Employee	Date	Time	
Jeffrey Hughes	January 19, 1999	0850 hours	
Site Name and Location	Job No./Pan		
Avery Street, Detroit, Wayne County, Michigan		KJ5104/6B135DSIXX	
Site is not fenced and easily accessible.			
ERCS did on-site sampling			
No wipe or soil sampling done after removal.			
First floor was scraped and deconned.			
Floor drains in basement of building (assume they lead to city	sewers).		
		2	
	9		
Signature/Date/ Hughles	-	1/19/99	

## Appendix E

Telephone Log - City of Detroit, Wastewater Treatment Plant

ecology and environment, inc.

12251 UNIVERSAL TAYLOR MI 48180 TEL 313-948-0900

International Spaceauts in the Environment

Mark Rana ... Originator

# PHONE CONVERSATION RECORD

Conversation with:	DateZ_/
NameMillen Johnson	Time 745 AMPM
Company Detrat Weste Winter Transmit Plant	
Address Manthane / Repair	Priginator Placed Call
	☐ Originator Received Call
Phone 313- 367-1201	W.O. NO
Subject Sewer Drainage	VV.O. NO
Subject	
Notes: M Tuhnia Marriel (512)	Roser 4 1
1111 Source Of the Title	Remove that all sucht laters the values here rains / Clarking the to
Www.restment / fast in settles Are	- values herma cains / Clading the to
the river.	
8	
-	
] File	Follow-Up-Action:
Tickle File//	- Phone Bob Malloch, Public Affairs
☐ Follow-Up By:	
☐ Copy/Route To:	
	Originator's latitude MAN
recepted accepter.	Originator's Initials
50,000 00001	. ८०. इंडिस इंडिंग स् प्रिलं अंगर <u>माना माना</u> माना

## Appendix F

City of Detroit, Department of Public Works

ecology and environment, inc., telephone log			
Contact	Company or Agency		
Ms. Taylor	City of Detroit, Department of Public Works		
Position	Contact Phone Number		
	313-224-3901		
E & E Employee	Date	Time	
Jeffrey Hughes	February 10, 1999	1045 hours	
Site Name and Location		Job No./Pan	
Avery Street, Detroit, Wayne County, Michigan		KJ5104/6B135ESIXX	
On-site building has been demolished (No date available).			
On-site building has been demonstred (140 date available).			
9 40			
F			
The second secon			
	1		
Signature/Date/ Hut/her 2/10/99			